

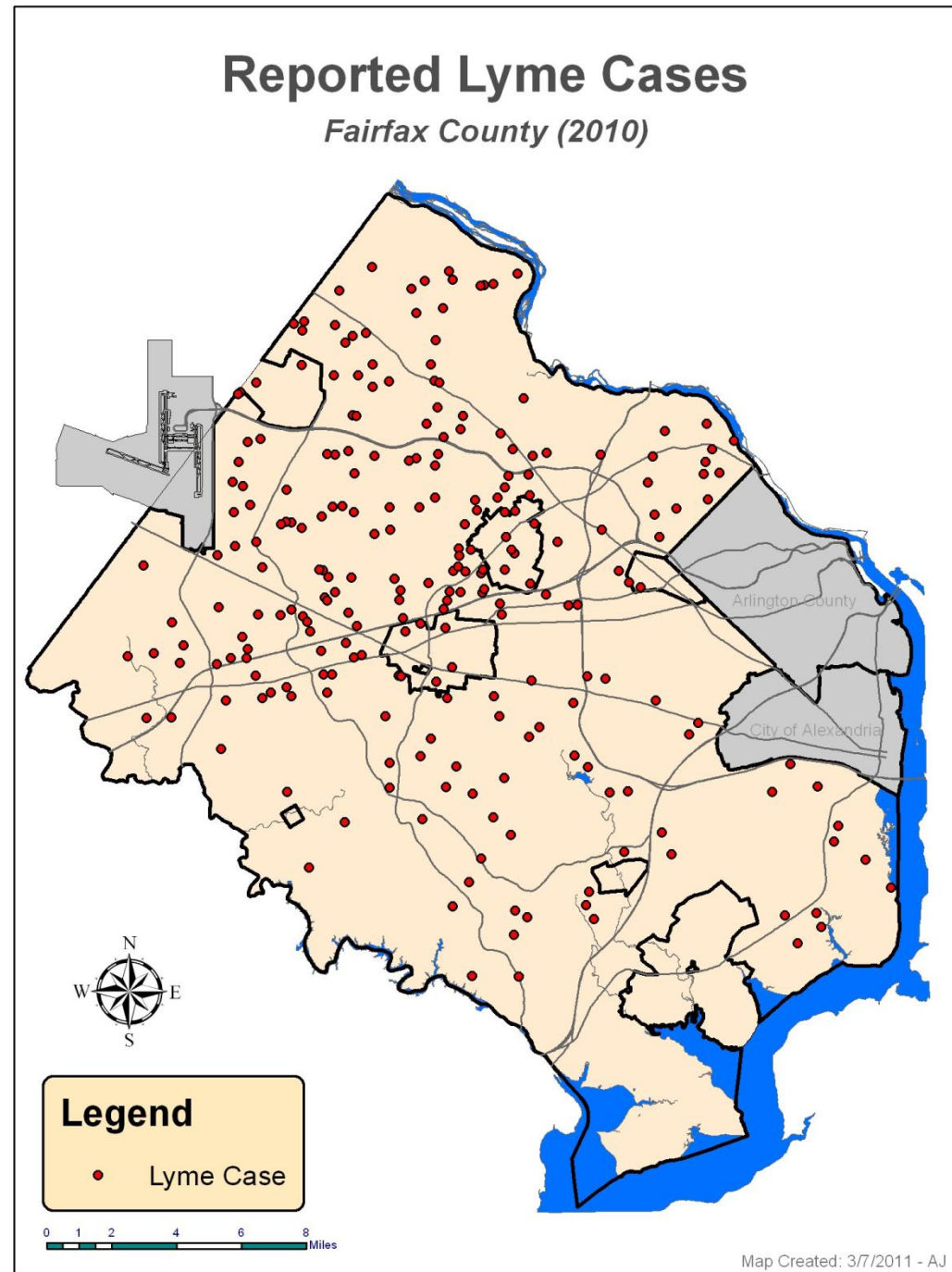
Ticks and Tick-borne Diseases in Fairfax County, VA

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Fairfax County

- Suburban/peri-urban
- ~1,000,000 residents
- ~400 square miles



What are we doing about Lyme disease and other tick-borne diseases in Fairfax County?

- **Tick and pathogen surveillance**
- **Community outreach and education**
- **Finding out what people know**

Tick Surveillance

- **2006-08**
 - Lyme disease focus
- **2009-10**
 - Expanded and more robust
 - Other ticks and tick-borne pathogens

Tick Sampling

- CO₂ trap (year-round)
- Drag
- Flag
- Host examination
 - Small mammal
 - White-tailed deer
- Veterinary clinics and animal shelter
- Tick ID service

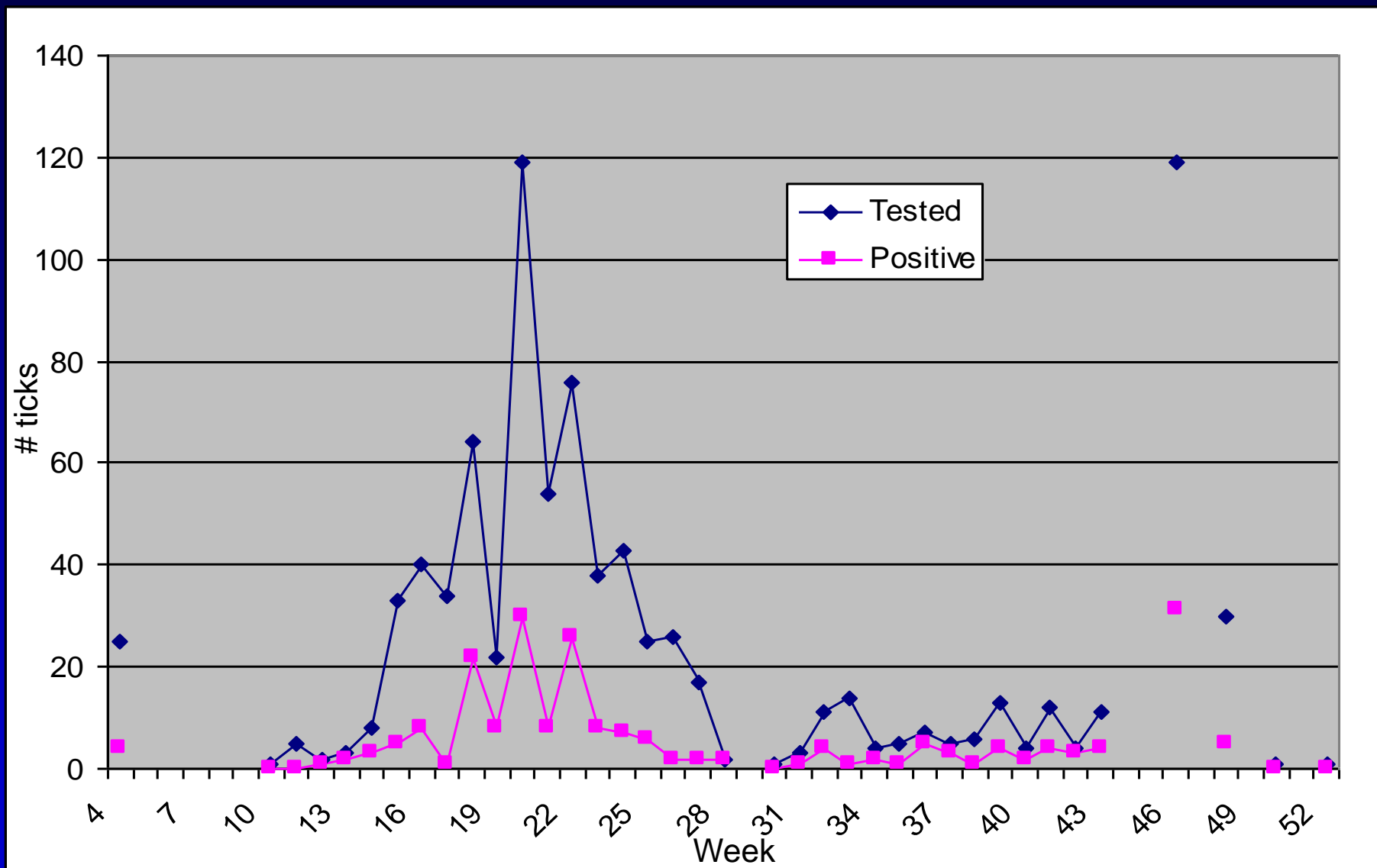


Summary of % of Selected Ticks Collected, 2010

Species	ID Service (n= 228)	Trapping (n=5,302)	Vet & Shelter* (n=583)
<i>Amblyomma americanum</i>	69.3	90.0	47.0
<i>Dermacentor variabilis</i>	13.6	2.0	13.0
<i>Ixodes scapularis</i>	16.7	8.0	40.0

* Does not include June collections

Ix. scapularis tested, *B. burgdorferi* positive, all stages, 2010



Frequency of Tick Pathogens* in the County, 2010

Tick Species	Pathogen	Infection Rate
<i>Ix. scapularis</i> Deer Tick	<i>B. burgdorferi</i>	24.3
	<i>A. phagocytophilum</i>	0.56
<i>Am. americanum</i> Lone Star Tick	<i>E. chaffensis</i>	6.3
	<i>B. lonestari</i>	2.1
	<i>R. amblyommii</i>	26.6
<i>Am. maculatum</i> Gulf Coast Tick	<i>R. parkeri</i>	40.8
	<i>R. amblyommii</i>	1.2
	<i>R. andeane</i>	0.6
<i>De. variabilis</i> Dog Tick	<i>R. parkeri</i>	0.3
	<i>R. montanensis</i>	0.97

*No *R. ricketsii* detected

Community Outreach and Education Efforts

Annual Lyme Disease Awareness Month Proclamation



COUNTY OF FAIRFAX, VIRGINIA Proclamation

WHEREAS, according to the Centers for Disease Control and Prevention, Lyme disease is an infectious disease not limited to age, ethnicity or geographical area and is the most common vector-borne disease in Fairfax County; and

WHEREAS, Lyme disease is transmitted by the bite of an infected deer tick, caused by a bacteria and gives early symptoms, such as a bulls-eye rash, fever, aching muscles, headache and fatigue; and

WHEREAS, more than 250 new cases of Lyme disease were reported in Fairfax County in 2009, while numerous cases go unreported or detected each year; and

WHEREAS, wearing a repellent, checking for ticks and proper tick removal are imperative, and if done correctly and promptly can aid in the prevention of the disease; and

WHEREAS, the Disease Carrying Insects Program of the Fairfax County Health Department provides residents with information about personal protection, tick control methods and tick identification services to protect people from this disease; **NOW THEREFORE**

BE IT RESOLVED, that the Fairfax County Board of Supervisors, on behalf of all residents of Fairfax County, does hereby proclaim May 2010, as

Lyme Disease Awareness Month

in Fairfax County and urges all residents to learn about Lyme disease and how to protect themselves and prevent this illness so they "Don't get sick from the bite of a tick."

Sharon Bulova, Chairman
Fairfax County Board of Supervisors

April 27, 2010
Date



Educational Materials

JUST SAY
KNOW

★ DRESS PROPERLY
★ USE REPELLENTS
★ AVOID TICK AREAS
★ FIGHT THE BITE!

Don't get sick from the bite of a tick

Fairfax County is home to at least four species of ticks. The Deer Tick, Lone Star Tick, Dog Tick and the Gulf Coast Tick.

- Each tick species can transmit a disease to humans
- Lyme Disease is the most commonly reported tick-borne disease in this area
- Deer ticks transmit Lyme Disease
- Deer ticks are very small and can be hard to identify.
- This dot • represents the size of a tick nymph
- The Deer tick is also known as the Black Legged tick

Prevent Tick-Bites

1. Dress Properly

- Wear light, long, loose clothing
- Tuck pant legs into socks
- Tuck in your shirt
- Pre-treat clothes with .5% permethrin
- Do not apply permethrin to skin
- Always follow label instructions

Don't dress like this!

2. Use Tick Repellent

- Apply 30% DEET (or other approved repellent) to exposed skin

Choosing the Right Repellent



Fairfax County Health Department
703.246.2300 | TTY 703.591.6436
fightthetick@fairfaxcounty.gov

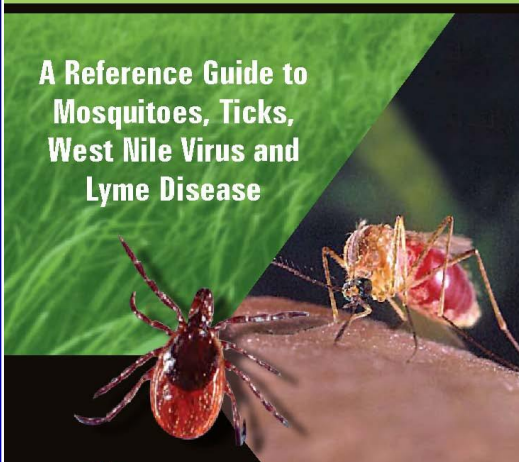
Ticks and Tick-Borne Diseases in Fairfax County



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Protecting Yourself from Disease Carrying Insects

A Reference Guide to Mosquitoes, Ticks, West Nile Virus and Lyme Disease



April 2008

>400,000

Let Us Identify Your Tick



We can help you!

After you remove the attached tick, bring it to our office and we will identify the tick for you.

Fairfax County Health Department
10777 Main Street, Fairfax Va 22030 • 703-246-2300

질병 유발 곤충으로부터 예방하는 방법

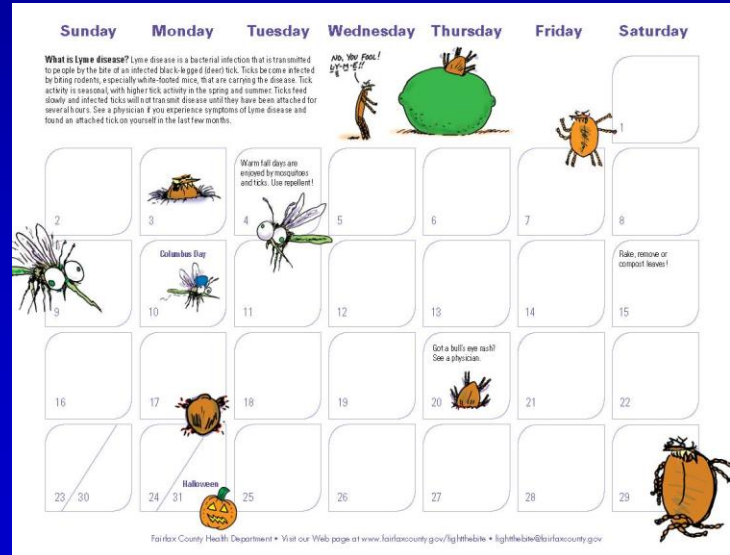
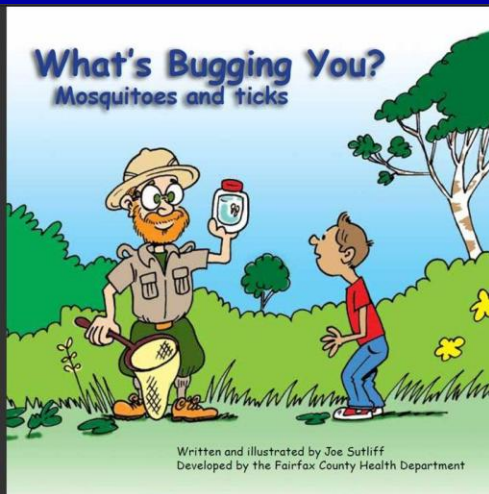
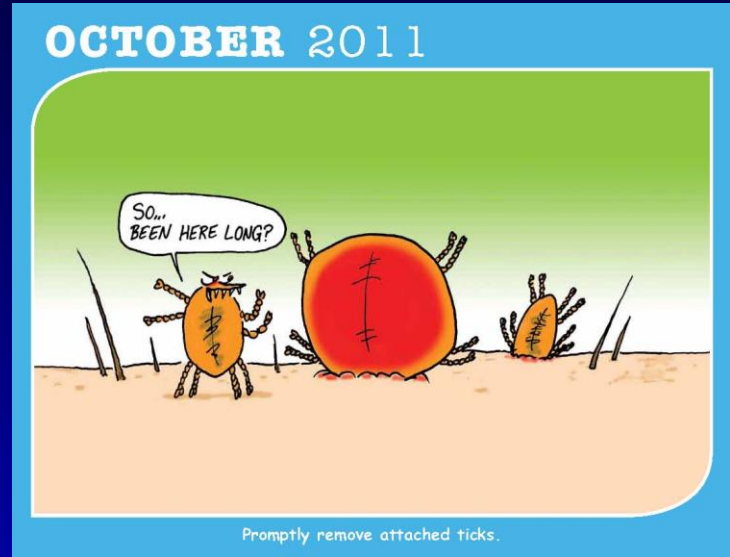
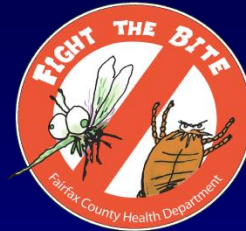
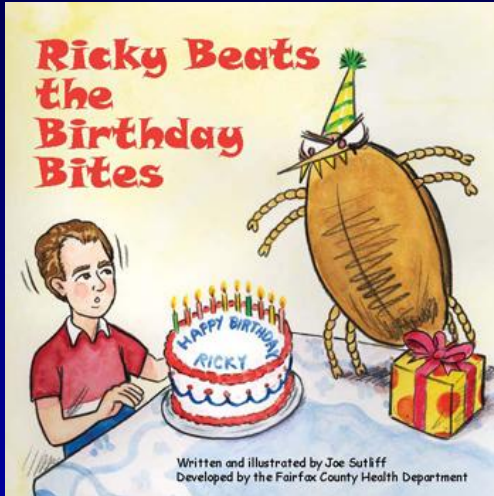


Cómo Protegerse de los Insectos que Transmiten Enfermedades



~50,000

Books, tattoos, calendars



Outreach Events



How are we measuring impact?

- Ticks and pathogens present
 - Compare data
 - Vector and disease ecology
- Educational materials
 - ?
- Community outreach
 - ?

KAP Study

- **K**nowledge
 - Understanding of topic
- **A**ttitudes
 - Feelings towards subject
 - Preconceived ideas on subject
- **P**actices
 - Demonstration of knowledge and attitudes through action

KAP Study

- Use to measure response to specific intervention (e.g., outreach and education)
- Track changes in KAP
- Tailor activities
- Pre- and post-intervention surveys
 - Baseline
 - Follow-up: Impact?

2007 Lyme Disease KAP Study

- Overall
 - Most heard of Lyme disease
 - Most knew how transmitted
- Hispanic subset
 - Interview in English or Spanish
 - Lack of awareness of Lyme disease and ticks in Spanish-speaking community



Evita las garrapatas,
ellas transmiten varias
enfermedades.



Los venados son el medio de
transporte de las garrapatas. Cuida
tu Jardín para evitar venados.



¿Sabías que las garrapatas
transmiten la enfermedad de
Lyme? Es una enfermedad
grave que puede ser evitada.



Repelentes

¿Sabías que puedes
protegerte contra los
Zancudos y garrapatas
usando un repelente contra
insectos?

Cómo Protegerse de los Insectos que Transmiten Enfermedades

Guía de Referencia sobre
los Mosquitos, las Garrapatas,
el Virus del Nilo Occidental y
la Enfermedad de Lyme



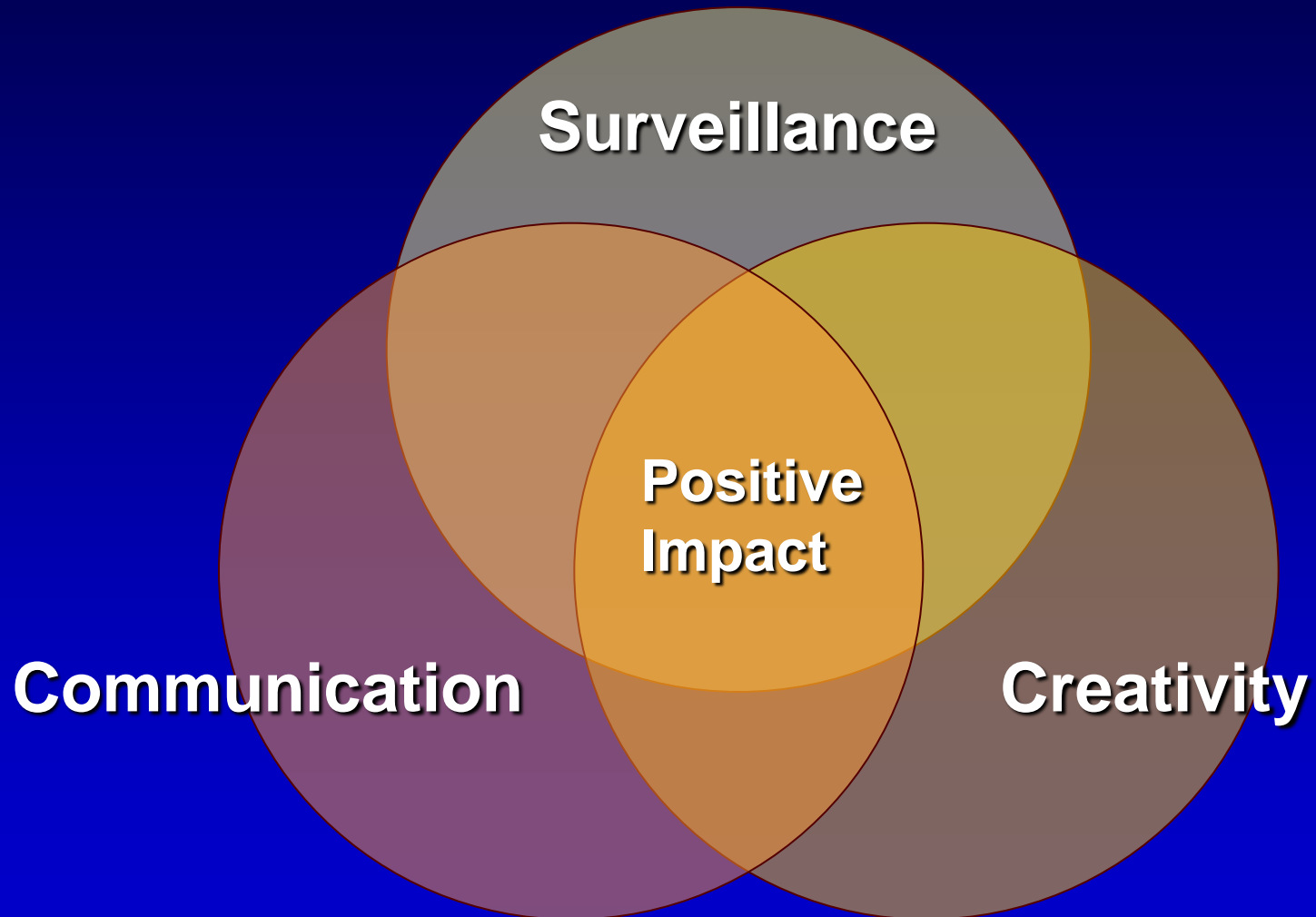
Abril de 2009



Departamento de Salud del Condado de Fairfax
(Fairfax County Health Department)
Tel. 703-246-2300, TTY 703-591-6433
www.fairfaxcounty.gov/fightthebite
fightthebite@fairfaxcounty.gov



Summary



THANK YOU

